

AMENDMENTS TO THE CLAIMS

1. (Previously presented) An article comprising a machine-accessible medium having stored thereon instructions that, when executed by a machine, cause the machine to:

measure power usage on the machine;

determine when a plurality of a quantum of power has been used on the machine; and

in response to usage of the quantum of power ~~the determination that a quantum of power has been used~~ on the machine, sample state data of the machine, where the state data indicates a state of code executing on the machine; and

analyze performance of the code executing on the machine based on sampled state data.

2. (Currently amended) The article of claim 1, having further instructions that, when executed by the machine, cause the machine to:

provide the sampled state data to a performance analysis module; and

compare the sampled state data to previously sampled state data for determining a power profile of the code based on the state data.

3. (Original) The article of claim 1, wherein the machine has a power measurement module.

4. (Original) The article of claim 3, wherein the machine comprises a plurality of subsystems and wherein the power measurement module is coupled to at least one of the plurality of subsystems for measuring power usage of the at least one of the plurality of subsystems.

5. (Original) The article of claim 4, having further instructions that when executed on the machine, cause the machine to:

measure power usage of at least one of the plurality of subsystems.

6. (Original) The article of claim 5, wherein the at least one of the plurality of subsystems includes a network subsystem, a graphics display subsystem, or a data storage subsystem.

7. (Original) The article of claim 5, wherein the at least one of the plurality of subsystems includes an input/output device or an expansion slot subsystem.

8. (Currently amended) The article of claim 1, wherein the state data is a program counter indicative of a state of execution of the code.

9. (Previously presented) The article of claim 1, wherein the state data comprises a program counter, status of the machine, status of at least one subsystem of the machine, status of at least one component of the machine, or status of at least one functional unit embedded in a subsystem.

10. (Currently amended) A method of profiling code executable on a machine, the method comprising:

measuring power usage on the machine;

determining when a plurality of a quantum of power has been used on the machine; and

in response to usage of the quantum of power ~~the determination that a quantum of power has been used~~ on the machine, sampling state data on the machine, where the state data indicates a state of code executing on the machine; and

analyzing performance of the code executing on the machine based on sampled state data.

11. (Original) The method of claim 10, wherein the machine comprises a plurality of subsystems, and wherein measuring power usage comprises measuring power delivered to at least one of the plurality of subsystems.

12. (Original) The method of claim 10, wherein the machine comprises a plurality of subsystems, measuring power usage comprising measuring power consumed by at least one of the plurality of subsystems.

13. (Original) The method of claim 10, wherein the machine comprises a plurality of subsystems and a power measurement module capable of measuring current or power delivered to at least one of the plurality of subsystems.

14. (Original) The method of claim 13, wherein the at least one of the plurality of subsystems includes a network subsystem, a graphics display subsystem, or a data storage subsystem.

15. (Original) The method of claim 13, wherein the at least one of the plurality of subsystems includes an input device or an expansion slot device.

16. (Original) The method of claim 10, further comprising:

providing power to the machine.

17. (Original) The method of claim 10, further comprising:

providing the sampled state data to a performance analyzer.

18. (Original) The method of claim 10, wherein the state data is a program counter.

19. (Original) The method of claim 10, wherein the state data comprises a program counter, status of the machine, status of at least one subsystem of the machine, status of at least one component of the machine, or status of at least one functional unit embedded in a subsystem.

20. (Currently amended) An apparatus comprising:

a power measurement module capable of measuring power usage in the apparatus and capable of determining when a quantum of power has been used; and

a power sampling module coupled to the power measurement module for sampling state data of the apparatus after each of a plurality of quanta of power has been used; and

a power analysis module that analyzes code executing on the apparatus in response to the sampling of the state data to develop a power profile of the code.

21. (Original) The apparatus of claim 20, further comprising a power source.

22. (Currently amended) The apparatus of claim 20, ~~further comprising a~~ wherein the power analysis module ~~capable of comparing~~ compares the sampled state data to stored state data.

23. (Original) The apparatus of claim 20, wherein the state data comprises a program counter, status of the machine, status of at least one subsystem of the machine, status of at least one component of the machine, or status of at least one functional unit embedded in a subsystem.

24. (Currently amended) The article of claim 1, having further instructions that when executed on the machine, cause the machine to profile power usage of the code executing on the machine.

25. (Currently amended) The article of claim 1, wherein the machine comprises a plurality of subsystems, the article having further instructions that when executed on the machine, cause the machine to profile power usage of the code executing within one of the plurality of subsystems.

26. (Previously presented) The article of claim 1, wherein the state data comprises a stack pointer, current memory usage, a number of instructions executed, or a number of accesses to a memory storage.